

ABSTRACT

According to the present invention, drive voltage pulses are applied between a pair of electrodes by driving a first power source having a specific voltage from a state in which the electrodes are maintained at the potential of a reference power source that is different from the potential of the ground power source, and then returning it to the reference power source. As a result, the gas discharge current or capacitance charging and discharging current accompanying the application of the drive voltage pulses is prevented from flowing to the first power source line. The above-mentioned gas discharge current or capacitance charging and discharging current resulting from the application of the drive voltage pulses flows to the first power source or the reference power source electrically separated from the ground power source, and does not flow to the ground power source line, so no noise is generated on the first power source.